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## THE PROCESS OF SOCIAL CHANGE.

THE phrases "natural selection," "the survival of the fittest" and "the struggle for existence," with others that come from the Origin of Species and the Synthetic Philosophy, are now applied to social phenomena and circulate very generally as descriptions of what goes on among mankind. Some people would question, however, whether they do not, as is alleged of our silver dollars, pass rather on the credit of their authors than on the value of any definite ideas commonly associated with them.

In the use of such phrases there does, indeed, appear to be a great deal of vagueness; and it is one object of this paper to do something toward clearing it up—to find out, if possible, whether these dubious tokens are in any way exchangeable for standard coin of the realm of thought and fact. With this end in view I purpose first to inquire how far natural selection of the primary, animal sort taught by Darwin is a process of social change; and then, if it appears that there is another process, I shall go on to consider its nature and operation. The inquiry falls conveniently into three divisions:

- I. Natural selection as a process of social change.
- II. Social change, proper.
- III. The influence of communication upon social change.

I.

So far as concerns the different race elements in the population of the earth, the Darwinian idea of change by survival—the idea that what exists does so because it has prevailed at some time or other in a struggle for existence—is not at all a speculation, but the most verifiable thing in the world. There may be doubt about other species, but in the case of *homo* the process has gone on in the light of history and continues in full

vigor at the present time. It would be difficult to find any large region where one race, nation or tribe is not increasing in numbers at the expense of the diminution of some other. Mr. Galton finds that "there are probably hardly any spots on the earth that have not, within the last few thousand years, been tenanted by very different races";1 and "that on the average at least three different races are to be found in every moderately sized district on the earth's surface." His impression of the races in South Africa "was one of a continual state of ferment and change, of the rapid development of some clan here and of the complete or almost complete suppression of another clan there." We are ourselves a part of this process. We are in the midst of a rapid and complicated movement of which the general direction is sufficiently clear, though the details are concealed. The European races are almost everywhere on the increase: within the present century they have nearly trebled in number, and with the Teutonic peoples in the lead, and the English at the head of these, have spread and multiplied over a great part of the earth.<sup>2</sup> In the United States we have seen the Indian go and the negro stay; while in our cities and our newer farming regions there is active competition among recent immigrants from all the European stocks, and between these and the descendants of immigrants of earlier date.

If the student turns, however, from the competition of races to inquire what is going on within any particular race, he does not find it so easy to learn what natural selection is doing: indeed, it is not easy to show that it is making any change that is of moment. Suppose, for example, that he were to inquire what alterations, aside from those due to intermixture with other

<sup>&</sup>lt;sup>1</sup> Inquiries into Human Faculty, pp. 310 et seq.

<sup>&</sup>lt;sup>2</sup> According to Hübner's Tables the population of Europe in 1895 was about 366 millions. In 1801 it was 175 millions. Levasseur calculates the number of Europeans out of Europe to have been 9½ millions in 1800 and 91½ in 1890.—La Population Française, vol. iii, ch. ix. Professor Brinton states that the white race two centuries ago numbered 100 millions, or about 10 per cent of the population of the earth; while at the present time the European branches alone number 500 millions, or one-third of the population of the earth.—See his Races and Peoples, page 298.

races, the English stock has undergone within historic time. To understand the nature of this question one must remember that great changes may come to pass in the institutions, manners, morals, and even in the outward appearance of a people, which do not necessarily imply that any organic change has taken place in the stock, either through natural selection or otherwise. If an English couple settles in this country, the children will contract from our climate and society peculiarities of appearance and behavior that will mark them as Americans to the eyes of all the world; but these changes have little to do with natural selection, and it is uncertain whether they can in any degree be transmitted by heredity. So, also, those transformations which make up the rise and fall of nations are chiefly, if not altogether, of the same quality. They take place far too rapidly to be due to natural selection or to any organic change in the race. Decadence seems to be a social deterioration that drags down the individual by subjecting him to unwholesome influences. Thus, there is no evidence that the Chinamen or Spaniards of to-day are congenitally much different from their ancestors in the proudest days of those nations: their degeneracy is apparently of the same character as that observed in the behavior of a group of boys who have fallen into bad ways.1 It is a decline of tone, of morale, of institutions, not of natural capacity.

The decisive illustration of the possible divergence between natural selection and social change is the fact that institutions hostile to survival, like the monastic system, can spread and flourish for centuries in defiance of animal heredity.

<sup>1 &</sup>quot;The Spanish-American of pure white blood, whose ancestors have lived for three centuries in tropical America, the citizen of the United States who traces his genealogy to the passengers in the Mayflower or the Welcome, have departed extremely little from the standard of the Andalusian or the Englishman of to-day though the contrary is often asserted by those who have not personally studied the variants in the countries compared. Conditions of climate and food materially impress the individual, but not the race. The Greeks of Nubia are as dark as Nubians, but let their children return to Greece and the Nubian hue is lost. This is a general truth and holds good of all the slight impressions made upon pure races by unaccustomed environments."—Brinton, Races and Peoples, pp. 44, 45.

The scientific test of organic difference would be to take new-born infants typical of the stocks to be compared and note what unlikenesses they developed when brought up under the Rude comparisons of this sort are same social influences. possible between contemporary peoples, but they are, of course, impracticable between different periods in the history of the same race. In the case of the Jews the matter has been studied as thoroughly as the nature of the inquiry permits, and it is thought doubtful whether that race has undergone any noteworthy change since the time of Moses.<sup>1</sup> As regards our own and kindred peoples - always leaving aside the mixture of races - I imagine that few anthropologists would venture to say anything positive. If they did, it is quite certain that there would be no agreement among them as to what the direction of change is. Many suppose, for example, that physical vigor is declining by disuse, by the growing preponderance of intellect as a factor in success, by the preservation of weakly children and by the support through charity of pauperism and vice.2 There is, however, no direct proof of a decline; and it is quite possible that the forces mentioned are more than counterbalanced by others which may be held to have an opposite tendency, such as better and more regular nourishment, the more general practice of systematic exercise, congenial marriages and the improvement of a great variety of degrading social conditions. side of this argument may be maintained by plausible a priori arguments, and in the present insufficiency of direct evidence there is no way to reach a definite conclusion.

It is even possible to question whether the thinking faculties are now stronger than they used to be. There has certainly been a great deal of mental work of various kinds among the Teutonic peoples since the revival of learning; but even if we suppose that the effect of such exercise can be inherited, we have still to consider that only a small fraction of the race has taken part in it. Moreover, when we see that the

 $<sup>^{\</sup>mathbf{1}}$  See papers by Neubauer and Jacobs in vol. xv of the Journal of the Anthropological Institute.

<sup>&</sup>lt;sup>2</sup> For an admirable discussion of the influence of charity upon survival, see Warner, American Charities, ch. v.

men who lead in letters, science and statesmanship often spring from a peasant class whose forefathers have not shared appreciably in the intellectual activities of the past, it is clear that ancestral culture is not essential in producing eminence of this It is significant, too, that one of the most noteworthy intellectual influences now at work comes from the Russians. a people new to civilization. In short, if we could transplant a few thousand babies out of our remote ancestry and give them modern nurture and training, they might, for aught we know, turn out their share of Congressmen, novelists and electrical engineers, and be little distinguishable in any way from the rest of the population. The statue called "The Dying Gladiator" represents a possible ancestor of more than two thousand years ago; yet he appears to me quite modern and familiar — a little wild perhaps, as we might expect from his mode of life, but otherwise such a man as we might come across almost anywhere at the present time.

Natural selection, apart from the conflict of races, is apparently much more active in preserving than in changing types, for it discourages wide deviation in any direction. Out-and-out criminals and those sunk in self-destructive vices are not, as a class, prolific; but no more are the people of conspicuous intellectual or moral power. It is the intermediate and undistinguished multitude that keeps up the population.

Some entertain the notion that the most degraded classes are the most prolific; but I know of no support for this. Among the conditions of a rapid natural increase are physical vigor and a fairly stable family life. In both of these respects the pauper and criminal classes are decidedly inferior to the rest of the population. On the other hand, many suppose that success and survival go together — that what we call competition is only a more or less mitigated form of the struggle for existence; and that as a rule and in the long run those who gain wealth, power, and other things for which men strive, are enabled to leave more children than others and so to perpetuate those characteristics to which they owe their success. It is often assumed that this is too clearly the case to require special

investigation; but this assumption will appear rash to any one at all familiar with statistics, and seems to have arisen, not from the direct study of mankind, but by a hasty inference from the results of biology. Men of unusual success are not unusually prolific: so far as can be made out from statistics they are as a class below the average in this respect. Indeed, a very plausible argument, backed by figures ad libitum, might be prepared to show that the successful do not survive and are therefore the unfit. Certainly nature's standard of success that is, survival — is quite distinct from the social standard; and to a great degree the two are opposed. To marry early and raise a large family is by no means favorable to the gratification of personal ambition. It seems, therefore, that conspicuous failure and conspicuous success are about equally unfavorable to survival, and that those paths which diverge very widely from the main-traveled road of ordinary humanity lead to extinction.

This conservatism in the conditions of survival is well illustrated by the case of educated women. They seem to be, on the whole, a very beneficent class of persons, and one whose progressive spirit it would be well to transmit in every possible manner; yet we cannot expect that the women who belong to it will leave as many children as those whose entire energy goes into reproduction. In fact, a large part of college women do not marry at all; and the remainder are likely to marry later and to have children at less frequent intervals than other women.<sup>1</sup>

It is, accordingly, not at all clear that natural selection, aside from the prevalence of races, acts definitely or rapidly as a cause of social change. No doubt the races of men, and especially those whose history is eventful, undergo more or less organic transformation: this must have been so in the past, since otherwise new types could not have originated; and it is not likely that the process has altogether ceased. This

<sup>&</sup>lt;sup>1</sup> See the Report of the Mass. Labor Bureau for 1885 on "The Health Statistics of Female College Graduates"; also "The Marriage Rate of College Women," *The Century*, Oct. 1895.

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transformation, however, is probably slow, and its character and direction are difficult to make out: the whole matter, involving as it does the laws of heredity, requires and will no doubt receive the most thorough study. In the meantime, it is apparent that natural selection of this simple, animal sort is not the ordinary process of social change. It has little to do with the rise, spread and decay of architecture, music, painting or poetry, or of the great religious systems; it is not the process by which governments become milder, popular education advances and manners meliorate; nor is it that by which new views prevail about childhood and the status of women.

II.

The process which generates opinions, moral standards and institutions, and which results in progress or decadence, is especially characteristic of human life, though it is thought to be operative in some measure among all the social animals. It rests upon the imitative, sympathetic and intellectual faculties, and is related to natural selection through the probability that these faculties have an evolutionary history in which natural selection plays a part.

It would not be difficult to show that the higher faculties of man are not, as some suppose, elements quite apart from and inconsistent with the struggle for existence, but are decisive factors in it while it endures, though tending to supplant it by rational and sympathetic coöperation. Imitation and sympathy, as well as intellect, are conditions of social power; and the evidence that they have arisen by the aid of natural selection is similar to, though much less tangible than, that which indicates that our bodily frame has thus arisen. It is not, however, important that I should discuss this question: it is sufficient to note the fact that our ascendency over the other creatures is associated with a flexibility of nature that comes from imitation and sympathy, and makes us apt for social change.

A man is not so much strong in himself as formed to make part of a strong whole. If reared from his birth by some wild creature and so cut off from those communicated arts and actions for which alone he is well fitted, he would make a poor struggle for existence, and might have to fall back upon his primitive skill in climbing trees. But in society he is strong; and the chief element of his strength is the fact that he is so far dominated by imitative and sympathetic faculties, that he adapts himself to an infinite variety of activities. He is, on the whole, a docile, conforming animal, and owes his power to his amenability.

The trend of psychological and sociological studies is distinctly toward the conclusion that the social factor in individual conduct is greater than has been perceived.<sup>1</sup> Every thought and every act guided by thought bears some relation to the social environment, past or present, and could not be the same if that were altogether different. A man is born with energies and tendencies, strong but vague, which, being incited and nourished by the world into which he comes, mingle indistinguishably with it to form a new organic whole, a character and a career. Imitativeness, which controls so many of our actions without our knowing it; the fear of disapproval, which leads to conformity, not only in dress and manners, but in the gravest parts of conduct; the hope of approbation, inciting aggressive spirits to perform daring deeds in the sight of mankind; hero-worship, patriotism, sympathy and love - all these give to society control over its members. The passion to be something in the minds and hearts of men is the very life of life, the fire which fuses individual energies into social power. Where our faculties touch this stream of human interest they glow at a white heat, like a piece of ore where it touches the streaming flame of the blow-pipe; the rest of us remains cold, inactive and unnoticed.

This need of approval is often called weakness and is con-

¹ It is hardly necessary to support this statement by references: the studies in "imitation," by Tarde, Baldwin and others, and Professor Giddings's theory of the "consciousness of kind" are familiar examples of the fact stated. The Proceedings of the National Conference of Charities and Corrections for 1896 contain (page 399) a paper by the present writer on "'Nature versus Nurture' in the Making of Social Careers" which treats briefly one phase of the matter.

trasted with the supposed strength of self-sufficiency; but in fact no man with any humanity in him is self-sufficient, and the love of approbation is weakness only when it leads to inconstant behavior. It is likely to be strongest in the finest organizations, and can hardly be extirpated: to try to get rid of it is to act like a man immersed in water, who should try to thrust the water from him with his hand. The most that men can do—and this is all-important—is to choose their approvers, perhaps substituting remote or even imaginary persons for those at hand, reading great books, observing wise persons, and thus cultivating a sense of heroic opinion. Since all must be hero-worshippers, it is a great thing to have the right sort of hero.

Human nature is hard to change, but its most inveterate quality is a susceptibility to social influences. We need to distinguish sharply between nature and conduct: one is the stable basis for infinite variety in the other. Association may not change nature, but it usually controls conduct. It will hardly make an irascible man patient or a dull one clever, but it may easily make one clever man an engineer and another an ingenious burglar. A career never comes by nature alone; the same nature will result in any one of a hundred careers, according to the influences that act upon it. We are bound to our fellows by heredity as to what is relatively permanent, and by influence as to what is plastic: human nature is transmitted by the one, institutions, conduct and opinion by the other.

It is this plasticity which makes each of us not so much strong in himself as fit to make part of a strong whole. Our thinking and feeling are not, like the animal instincts, predetermined to work for a single object, but are unspecialized, working according to principles of general utility toward ends set before us by the society in which we live. We are so happily contrived that humanity can progress without a change in human nature, through the peculiar constitution of the nature we already have. A due measure of conformity is, accordingly, one of the conditions of social prog-

ress. The conforming influences are often deplored, as by Emerson, where he says that "society is in a conspiracy against the independence of each of its members," and that "to be a man is to be a non-conformist." This is true, in a way, and helpful; but it is also true that conformity is a social discipline from which no one can or ought to be entirely free. It levels up as well as down, prevents crime and anarchy as well as hinders genius, and knits men together into a strong yet tractable whole. A party of explorers who are on a difficult march must keep together, even if they cannot agree upon the best route; and most men are necessarily so constituted that they have no inclination to leave the ranks.

Human evolution, then, like animal evolution, rests primarily upon power; but power rests upon coöperation, and coöperation involves social discipline and individual amenability. Mankind is strong through good understanding, through the timely abnegation of strife, through institutions that symbolize and confirm social unity — above all through a human nature that is not only intellectual but imitative, conforming, sympathetic and capable of congregate enthusiasms.

This imitative and sympathetic human nature, which is a means to social power, implies the process of social change. Working and worked upon through the marvelous mechanism of language, it is capable of fusing men together into a fluid whole, every part of which in some way feels and responds to the motion of every other part. In this fluid are propagated an infinite number of movements of thought and action, among which - by the law of chances, if for no better reason, — opportune variations from time to time occur. Their opportuneness being in some measure perceived, these innovations tend to be preserved and accumulated, rooting themselves in tradition and tendency, and getting themselves set forth to the mind and eye in laws, creeds and architecture. It is of such movements that historical change chiefly consists. The process is one of survival, in which the conscious selection of men is an important factor; but the consciousness is mostly limited to the immediate detail. It is only recently that the general trend of social movements is beginning to be in some degree a matter of knowledge and of choice. describing the process of social change it is suggestive to liken it to a wave or a combination of waves; but, as commonly happens in attempting to set forth social facts as analogous to physical phenomena, this figure falls hopelessly short of the truth. A reasonably clear perception of the matter can come only by a study of the process of communication — a study which is the key to the translation of the facts of social change from the language of psychology to that of history. The two things that must always cooperate are human nature and the mechanism of communication. The first is a relatively permanent factor; but the second is highly variable, and is for that reason of peculiar interest and importance. Its variations have generally been in the direction of greater efficiency, and it is largely because of this fact that the history of the past two thousand years is a record of rapid and accelerating social change.

## III.

We know that man is a sympathetic, communicating animal; and I have urged that this is what makes him amenable, plastic, fit to be formed by a social environment. But what forms the environment? The evolution of environment is the most momentous change in history.

A man's social environment embraces all persons with whom he has intelligence or sympathy, all influences that reach him. If I read Aristotle, my environment extends back two thousand years; if I read the dispatches from Japan, it takes in the antipodes. That I can be influenced by the Iliad, the New Testament and other utterances of men distant from me in time and place, is due to the arts of writing, printing and transportation, just as the fact that I can receive a complex thought from my neighbor is due to the art of speech. In other words, the social influences act through a mechanism; and the character of their action depends upon the character of the mechanism. The existing system of communication

determines the reach of the environment. Society is a matter of the incidence of men upon one another; and since this incidence is a matter of communication, the history of the latter is the foundation of all history. It is perhaps worth while to recall some of the more obvious facts of this history, and to make some suggestions as to what they mean.

The mechanism of communication includes, of course, gesture, speech, writing, printing, mails, telephones, telegraphs, photography, the technique of the arts and sciences—all the ways through which thought and feeling can pass from man to man.

Speech no doubt knit prehistoric men into groups and enabled them to emerge into history with a social nature and social institutions. But as an instrument of social organization speech has great defects; it lacks range in both time and place. It can go only where the man goes; and though it can pass from man to man, and so from generation to generation, it flows in a slender and wandering stream, limited in capacity, and diverted in direction by every mind through which it passes. What would the New Testament or the works of Plato now be if they had come down to us by this route?

For the precarious strand of oral tradition writing substitutes strong bonds, numerous and indestructible, reaching all times and countries where the art is practiced and binding history firmly together. It makes possible wide political sway, which cannot well be organized and maintained without recorded laws and precise instructions; it permits the advance of science, which is a cumulative achievement that implies the hoarding of knowledge in dusty manuscripts; it is the condition of a diversified literature, for tradition, which cannot carry much, limits itself to what is most prized, chiefly stories: writing, in short, may without much exaggeration be said to underly all social enlargement and individual specialization. It extends immeasurably the environment of all persons who can read and can get

<sup>&</sup>lt;sup>1</sup> I believe there is no instance of a people which has attained a definite, extended and stable political organization without the use of some form of writing. Compare Gibbon's observations in the Decline and Fall, vol. i, p. 354 (Milman-Smith edition).

hold of the manuscripts; and it permits one to form his own environment by retaining what suits him from a variety of materials, and by opening communication with congenial minds in remote times and places. In so doing each individual, of course, becomes a center for the distribution of what he receives, and extends the environment of many others. Mankind thus attains coöperation, continuity and the capacity for rational and enduring progress.

The particular function of printing is to make communication general or democratic. So long as handwriting was the only means of record, books were costly, newspapers were not to be thought of and direct access to the stores of thought and feeling was the privilege of a few. Under such conditions opportunity was like the early sun: it lit up a hilltop here and there, but left the plain in shadow. Printing, to put it otherwise, may not make the stream of knowledge deeper or improve the taste of the water, but it does open a path along the margin and give every one a cup from which to drink. With popular education, which is its natural complement, it forms the principal free institution, without which no other sort of freedom could long endure, and by the aid of which we may hope to gain more freedom than we have.

It is well worth while to reflect what these changes mean to the individual man, born with the aptitude for indefinite development through an imitative and sympathetic nature. Consider, for instance, a group of our ancestors of several thousand years ago, comparatively small, without the art of writing and with little knowledge of other groups. Primitive life is a field fertile in controversy and one not likely to be exhausted; but most students will admit the probability that our distant forefathers lived in small societies, were unlettered and had the vaguest notions about the rest of mankind. Such groups carried on with one another a true struggle for existence; but within each of them — that is, within the range of possible good understanding — there was an active social life. Mothers loved their children and men fought for their chiefs; the thoughts and acts of all were bound together by imitation, the need of approbation

and the communicative motives in general. In this social medium were propagated such movements of change as its dimensions permitted. But think of the narrowness of those dimensions, of the paucity of models for imitation, of the extreme vagueness of knowledge regarding the great men of the past and of the total ignorance regarding those of other societies! A meagre environment limited the development of innate tendencies and capacities, and the comparative sameness of thought and action reflected the narrowness of the general life.

In such a state of things all the wider social relations must be either hostile or authoritative. Since communication is the precise measure of the possibility of social organization, of good understanding among men, relations that are beyond its range are not truly social, but mechanical. In justice to the past we must recognize that before the rise of printing and telegraphy it was impossible for the mass of people in any large state to have a free and conscious relation to the social whole. The basis for a social consciousness did not exist. People in general could not comprehend what was going on, and their actions were necessarily regulated by authority. The peasant, the common soldier, could not coöperate in the larger social movements except as a truck horse coöperates in movements of trade.

If two persons who cannot understand each other come in contact, three things are possible: they can separate, they can fight or one can enslave the other. In the same way, the social groups of the ancient world could ignore one another, wage war or be bound by coercion into a mechanical whole. As the first was usually impracticable, and as mechanical union proved stronger than none, it was the third course that commonly prevailed. This was especially the case after communication was advanced to such a point that the organization of extensive military despotisms became practicable. In antiquity a large free state could not be formed, and a small one could not maintain itself.

If we put together these things, this poverty of influences and this habit of war that could be replaced only by something

in the way of servitude, we have gone far in explaining the known differences between our remote forefathers and ourselves. They may have been very unlike us, but it is not necessary to suppose that they were, in order to explain their leading unlike lives.

To the man of to-day society, tending now to become a coöperating whole through that extension of knowledge and sympathy which has come with the rise of communication, offers a selection among many environments. In the relation between himself and the rest of mankind he takes more and more an active part, accumulating the elements of a characteristic environment by the working of elective affinity. One may be an imitator — as indeed all must be — and yet unfold, through imitation, a character different from that of every one else. The breadth and diversity of life, dependent upon communication and daily widening before our eyes, tends, in short, to set man free by opening to his sympathetic and conforming nature a "proud choice of influences." He is not merely, as in primitive times, a member of a social group which tends to shape his thought and action; he is the point of intersection of many groups, each of which, though dispersed in time and place, has a real and definite influence upon him. Nowadays one is not less dependent upon social influences than formerly, but he is less dependent upon the particular ones that happen to be nearest him. Every book, every newspaper, every work of sculpture, painting or music to which one has access, every person or place brought within his reach by the facility of travel, is a shop which he may enter to examine the goods and buy if he will. A million environments solicit him; there is eager competition in place of monopoly.

It is upon this multiplicity of accessible influences, and not upon any radical change in human nature, that the present variety and comparative freedom of individual development chiefly rest. If one looks at the circle of his acquaintances he sees nothing of the sameness that prevails among savages; each man has distinctive opinions and modes of action, and so appears to stand by himself. This deceptive appearance is due to the fact that social relations are no longer con-

trolled by mere contiguity. Through the arts of intercourse association is throwing off the gross and oppressive bonds of time and place, and substituting congenial relations of sympathy and choice. So, if a man seems to stand alone, it is mostly because he stands with those who are not visible; if he seems not to keep step with the procession, it is probably because, as Thoreau said, he hears a different drummer. We know little of the influences that formed his early imaginations, or of those persons whose approval he now desires and to whose examples and opinions he tries to conform his actions. They are often far distant -his parents and early friends, perhaps, or the leaders of his profession, or book-people — but the fact remains that character and conduct are nourished upon social influences. A reading of autobiographies, or a perusal of those private records which people carry in their memories, would show that men are still imitators and hero-worshippers. This is particularly true of children, who spend much of their mental life in imagining scenes wherein by glorious actions they gain the applause of some persons they admire. And of course the modes of thinking and acting that originate in sympathy and admiration tend, like everything else we do, to become habit, and to persist amid circumstances very different from those in which they began, seeming then to come from self-sufficient personality.

The same conditions favor also the more conspicuous forms of individuality — that is, originality and genius. Originality is not something independent of surroundings, but rather a characteristic way of reacting upon them. Let a man be as original as you please, he can unfold and express his originality only through such influences and materials as are accessible, and the number and variety of these are matters of communication. "We are indeed born with faculties," said Goethe, who gave lifelong study to this matter, "but we owe our development to a thousand influences of the great world, from which we appropriate to ourselves what we can and what is suitable to us." In order to have genius it is essential that a remarkable child shall be born into the world; but an outfit of natural

faculties, however remarkable, is only one of two sets of factors whose product is a career. A gifted child, like an acorn, has indeed the capacity of marvelous growth, but can come to nothing unless it finds fit nutriment. The idea of a necessary antagonism between individuality and association is an illusion. The two are mutually dependent: they have always developed, and always must develop, side by side. As a rule, it is not too much association that cramps us, but the wrong kind.

Finally, it is not hard to see how this enlargement of intercourse has affected the processes of social change. Let us go back to the comparison with waves, which, after all, is better than none. As regards the transmission of influences, primitive societies may be likened to narrow strips of water. extended more in time than in place, but even in the former direction were liable to be cut off by conquest or decay; they were connected with one another by the shallows and marshes of occasional intercourse and by quickly subsiding freshets of federation. Social change was necessarily local, like the waves on such small waters. Modern society, on the other hand, is more like the uninterrupted ocean, upon which the waves of change meet with no obstacles except one another, and roll as high and as far as the propagating impulse can carry them. Thus, to take a conspicuous instance, certain movements in art, letters and philosophy, originating we scarcely know how or where, but attaining great height among the Greeks, rolled on over the unconscious Middle Ages till they struck the contemporaries of Petrarch and thence were propagated in widening circles to the present time. The invention of writing opened the world to the competition of social institutions very much as maritime navigation opened it to the competition of races. The field was enlarged, and all movements proceeded on a great scale.1

This extension of the medium of change is accompanied by

<sup>&</sup>lt;sup>1</sup> There is no better illustration of this than the rise of vast religious systems based upon the recorded lives and maxims of their founders. It is quite possible that individuals of transcendent character appeared in prehistoric times; but the imitation of them could not be organized into extensive and enduring systems without the aid of authentic records.

an equally remarkable differentiation within it, implied in what I have already said about the growth of individuality. There are as many social media as there are specialized groups of sympathetic and communicating individuals, and in choosing his environment a man chooses what groups he will belong to. Each of these groups or media is subject to movements more or less peculiar to itself; it has in some measure its own opinions, institutions and traditions. So, if one wishes to liken modern social movements to waves, he must conceive an indefinite number of wave-transmitting fluids, interpenetrating one another as the light-bearing ether interpenetrates the sound-bearing air; each of these transmitting most readily undulations originating in itself, yet feeling the influence of those originating in the others; each fluid by itself, as well as the united whole, traversed continually by a multitude of waves having every imaginable difference in force, period and direction. Even when so stated the comparison is still inadequate in various ways, chiefly in that it does not suggest the active part that may be taken by individuals. It represents what would happen if each one were in equilibrium, with every congenial relation established; when in fact each of us is continually stirring about more or less in search of the congenialresisting, refracting or augmenting the social impulse in a way peculiar to himself. Yet, so far as men have like natures that come into sympathy through communication, they really form a sort of a fluid in which impulses are propagated by simple suggestion or contact. If two persons of like feeling for form and color stand before a painting, they and the artist are one through the picture.

The freer development of individuals involves, of course, a freer development of the social order; inasmuch as relations of choice—relations that suit the feelings of men—tend to spread and to prevail over those of hostility or coercion. It is the tendency of communication to give human nature a fair chance, levelling before it the barriers of ignorance, blind hostility and constraint of place, and permitting man to organize his higher sympathetic and æsthetic impulses.

Within the past fifty years there have been developed new means of communication, - fast mails, telegraphs, telephones, photography and the marvels of the daily newspaper, —all tending to hasten and diversify the flow of thought and feeling and to multiply the possibilities of social relation. The working of these agencies is too important to be discussed hastily, and to discuss it fully would carry me too far; I shall therefore only point out that they make all influences quicker in transmission and more general in their incidence, accessible at a greater distance and to a larger proportion of the people. So far as concerns the general character of social change, the effect may be described as a more perfect liquefaction of the social medium. A thick, inelastic liquid, like tar or molasses, will transmit only comparatively large waves; but in water the large waves bear upon their surface countless wavelets and ripples of all sizes and directions. So if we were to compare the society of to-day with that of fifty years ago, we should find that great changes are somewhat facilitated, and that there is added to them a multitude of small changes which in former times could not have extended beyond the reach of personal contact. Light ripples now run far: the latest fashion in coats or books permeates the back counties and encircles the earth.

The process of change that I have described involves selection, and is perhaps as natural as anything else. Hence we may, if we choose, call it natural selection. It comes about through the competition of influences and the propagation of opportune innovations in thought and action. The selective principle, the arbiter of competition, is ever human nature—but human nature conditioned in its choices by the state of communication, which determines what influences are accessible, as well as by the constraining momentum of its own past.

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